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Remarks

The subject RCE and this Preliminary Amendment address the issues set forth in the Examiner's Advisory Action dated August 9, 2004 as well as adding new claims to more clearly claim that which Applicants consider the invention. Specifically, the Examiner sustained his rejection of claims 1-18 based on the alleged teachings of U.S. Patent No. 5,978,359 to Caldara in combination with U.S. Patent No. 6,172,963 to Larsson. In the Examiner's Advisory Action he indicates that the applicant argues that Caldara teaches sending the ACCEPT/REJECT bit upon a specific REQUEST message being sent form the input buffers, which teaches away from the invention. The Examiner has only relied upon Caldara for the feature of sending an ACCEPT/REJECT bit, which has been equated to the token bit of the present invention. Larsson allegedly provides evidence of updating grant credits based on actual cells received in an output buffer in determining whether to send more cells to the output buffer.

In response, Applicant respectfully traverses Examiner's argument in the Advisory Action and the prior rejection of the claims under 35 U.S.C. §103. Specifically, Applicant offers that the Examiner-offered description of "reading the degree of fullness of the output buffers" does not occur nor is there apparatus components presented and claimed that perform this act. Each integrator block 206 of Stage-1 202 accumulates the grant tokens received from Stage-2 204 with the initial value $grant_i(0)$ 230 as a starting point. Each integrator block 206 such as i-th integrator takes as input the logic values or token bits representing grant tokens from the corresponding statistics block 208, i.e., i-th block Stage-2, as well as from its neighboring blocks #(i-1) and #(i+1). Statistics block 208 (e.g., i-th element) updates the threshold block 216 via the integrator block 206 when data packets arrive and depart at Stage-2. The corresponding first stage integrator block 206 (e.g., i-th output element) receives logic values or token bits from the statistic block 208 and updates grant credits. Briefly, grant credits represent the availability of a second stage element to receive an incoming data

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packet for routing. When grant$_i$ (k) = maximum among [grant$_i$ (k), i=0, ..., n-1], the packet is sent from the i-th element of Stage-2 and the first stage performs updates upon receiving the token bit from the second stage. Accordingly, the Examiner's conclusion that the claimed feature of an integrator block for receiving a token bit and updating a grant credit in response thereto (and as otherwise claimed in Claim 1) is met by Larsson is incorrect. In other words, the subject integrator block <u>does no reading of any kind with respect to the input buffers</u>. When a decision of grantI(k) = maximum, a packet is sent from the ith element and the appropriate updates are made via the token bit receipt and grant credit value updated as claimed.

As presented earlier in the prosecution history, there is no requesting of how many cells to send and where to send them in the subject invention. The Examiner refused to accept Applicant's earlier argument that Caldara is not suggestive of the subject invention because of its two step process to send information (as seen at Page 4 of the Applicants June 24, 2004 submission after Final Office Action. Larsson expresses the very same (at least two step) process prior to data transmission. Per Col 5, lines 12-40 of the reference, requests must be made ("reading"), then a calculation of the degree of fullness of each buffer prior to data transmission. The subject invention (via the grant updating mechanism) eliminates this two step process. Accordingly, any combination of Larsson with Caldara results in at least two messages having to be sent through the switch (the REQUEST and the actual DATA) which teaches away from the subject invention and fails to provide the discussed advantages.

Similar arguments and conclusions are drawn with regard to the independent method Claim 10. Specifically, the method recites the step of notifying a plurality of first stage port processors <u>in response to receiving a data packet</u> from one of the plurality of first stage port processors <u>and not</u> in response to a <u>request message</u> (which does not include data) followed by a corresponding feedback message in order to practice the subject method. While Larsson attempts to disclose some form of "giving credit" in a data transmission system, it

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focuses on the aspects of "over-allocation" that allows the input ports to always request to send more cells than the respective output ports can process without placing any cell in its output buffer (column 4 lines 56 through 65). This type of system is not as sophisticated as the subject invention; hence, would not suggest to one skilled in the art to control and manage information traffic flow in the manner claimed. Accordingly, it is respectfully submitted that the combination of Caldara and Larsson fail to suggest the invention recited in independent method Claim 10.

As such, the Applicant submits that claims 1 and 10 are not obvious and fully satisfy the requirements under 35 U.S.C. § 103 and are patentable thereunder. Furthermore, claims 2-9, 11, 12 and 15-17 depend, either directly or indirectly, from independent claims 1 and 10 and recite additional features thereof. As such, and for at least the same reasons discussed above, the Applicant submits that these dependent claims also fully satisfy the requirements under 35 U.S.C. § 103 and are patentable thereunder. Therefore, the Applicant respectfully request that the rejection be withdrawn

Allowable Subject Matter

Earlier in the prosecution history, the Examiner indicated that claims 6-9,13,14 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, Applicant has prepared a new set of claims 19-36 that closely follow the Examiner's proposal of allowed subject matter with some exceptions. Specifically, new claim 19 incorporates features of claim 1 and claim 6 but does not include the features of intervening claims 2-5. It is believed that since none of the features of claims 2-5 are further recited in claim 6, these intermediate features are not required in a new independent claim (such as 19) to provide a patentable distinction over the cited art. Similar strategy was used in drafting new claim 31. As such, review of

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new claims 19-36 is respectfully requested and their swift passage to allowance earnestly solicited.
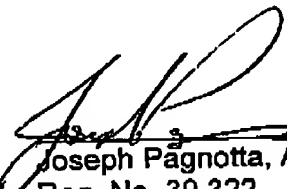
Conclusion

Thus, the Applicant submits that claims 1-36 are in condition for allowance. Furthermore, the specification has been amended as requested by the Examiner. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Joseph Pagnotta at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

August 24 2004

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CERTIFICATE OF FACSIMILE TRANSMISSION under 37 C.F.R. §1.8

I hereby certify that this correspondence is being transmitted by facsimile under 37 C.F.R. §1.8 on <u>August 24, 2004</u> and is addressed to MAIL STOP RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Facsimile Number: 703-872-9306.

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Signature   Date of Signature

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Type or print name of person signing certification

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